Huanglongbing (HLB) Program Overview Florida









Paul L. Hornby
State Operations Support Officer
USDA/APHIS/PPQ
Gainesville, Florida

Florida HLB Program Overview Background

- HLB is caused by a phloem-limited bacteria
- > Three species of HLB, Candidatus Liberibacter
 - Africanus
 - Asiaticus
 - Americanus, recent form found in Brazil
- Two psyllids transmit HLB
 - Asian citrus psyllid, Diaphorina citri
 - African citrus psyllid, Trioza erytreae
- Asian citrus psyllid, *Diaphorina citri*, was discovered by FDACS-DPI in Delray Beach in June 1998



Florida HLB Program Overview Background

- > HLB is either psyllid or graft-transmitted
- > ~1-2 year latency period before symptoms develop
- > HLB infects most citrus species, hybrids and cultivars, and some citrus relatives.......Murraya paniculata???
- ► HLB requires PCR analysis for confirmation as it has not been cultured to date
- ➤ HLB is considered to be one of the most serious diseases of citrus in the world
 - In areas where the disease is endemic, citrus trees live for only 6-8 years, and most never bear usable fruit
 - Fruit from infected trees has poor color and bad flavor
 - In some areas where HLB is endemic it is no longer economically feasible to produce citrus

Florida HLB Program Overview Timelines

➤ Initial detection made in late August 2005 in South Florida by CAPS / SITC team conducting a Hot Zone survey at an Asian farm growing exotic tropical fruits.











HLB - ICS Unified Incident Command Staff



Unified ICS was established and operated from September 13th through October 14th





Florida HLB Program Overview Hurricane Rita – September 20th





HLB – ICS Program Activities Personnel

	Assigned	Available
Federal Employees	42	42
State Employees	21	21
Total	63	63



HLB – ICS Program Activities Survey

	10/13/05 Totals
Number of Properties Surveyed	2,328
Number of TRS's Surveyed	409 (44 PG)
Number of Samples Taken	1,361
Number of Positive Properties	156
Number of Positive Trees	179
Number of Positive TRS's	80



HLB – ICS Program Activities Commercial Grove Survey

County	Survey type	Groves Surveyed	Acres Surveyed
Lake	Pummelo	4	11
Lee	Pummelo	1	10
Hardee	Pummelo	6	26
Hendry	Pum. & Per.	2	11,005
Hillsborough	Pummelo	7	8
Martin	Pummelo	2	5,020
Palm Bch.	Peripheral	3	5,200
Polk	Pum. & Calomondin	22	65



HLB – ICS Program Activities Regulatory

	Totals to Date
Nursery Blocks Contacted	85
Nursery Blocks Inspected	165
Nursery Blocks Quarantined	114
Compliance Agreements Issued	8

DPI and PPQ have worked to harmonize the HLB compliance agreement and inspection and certification procedures for the intrastate and interstate movement of psyllid host material

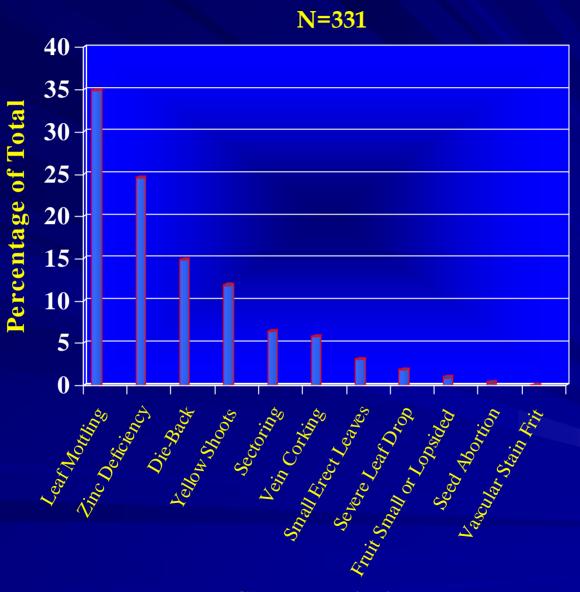


HLB – ICS Program Activities Control

HLB Positive Properties	19
HLB Positive Trees Cut	19
CCEP Waiver Control Trees Cut	11



Percentage of HLB Symptoms at Single Host Properties





Characteristics

HLB - Program Activities Survey Data Collection

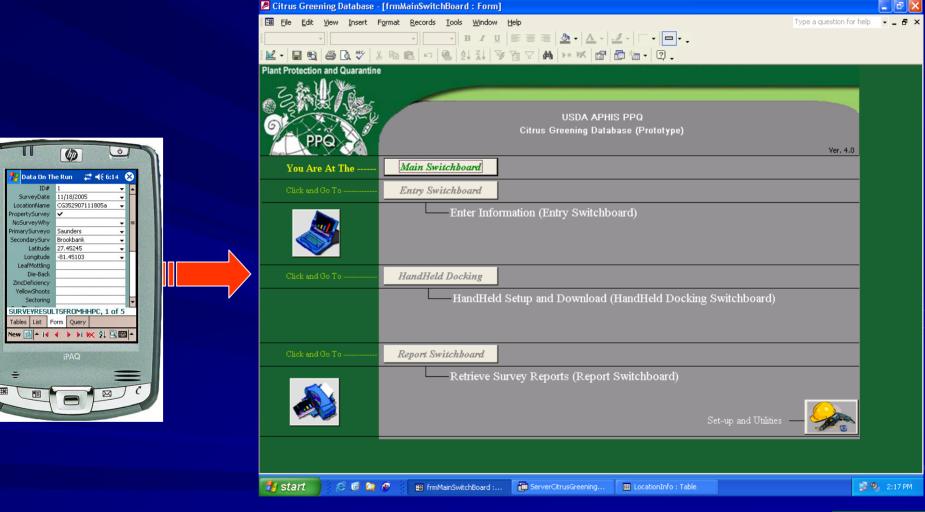




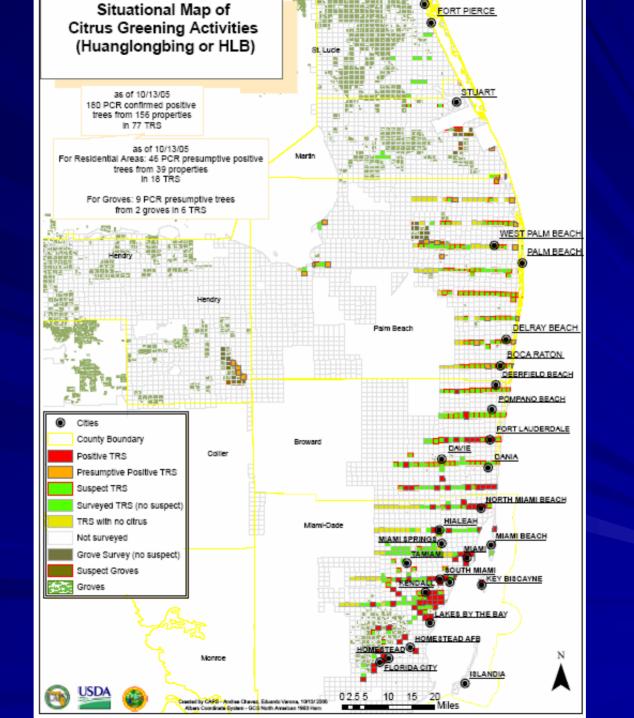




HLB - Program Activities Survey Data Collection

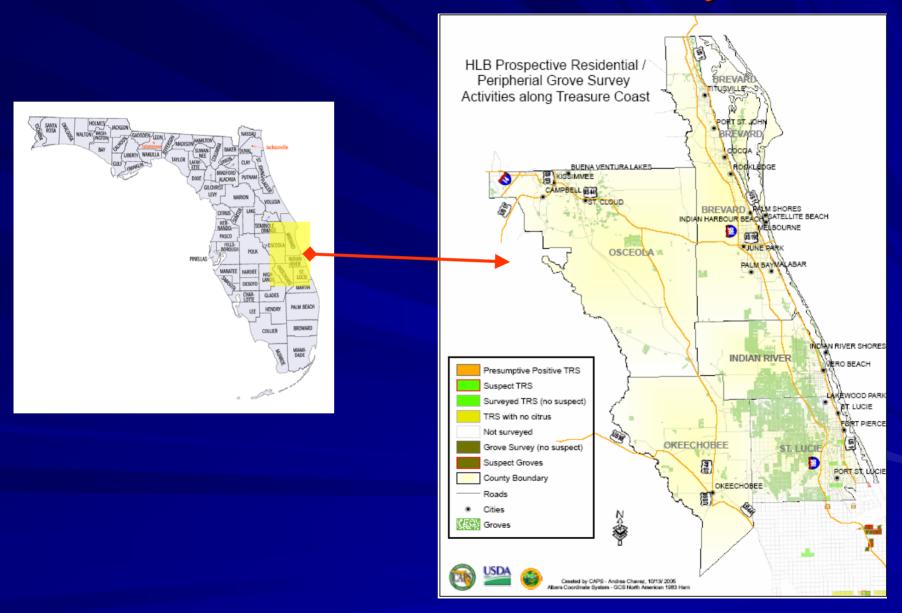




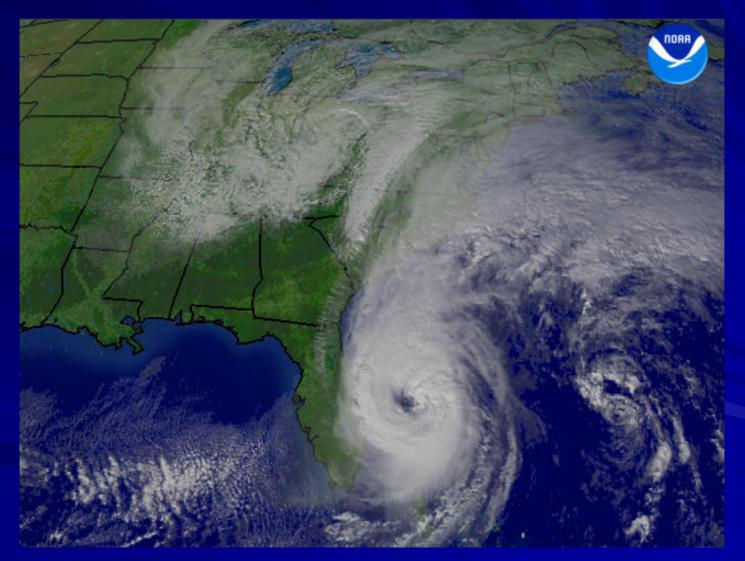




HLB - Program Activities Treasure Coast Survey

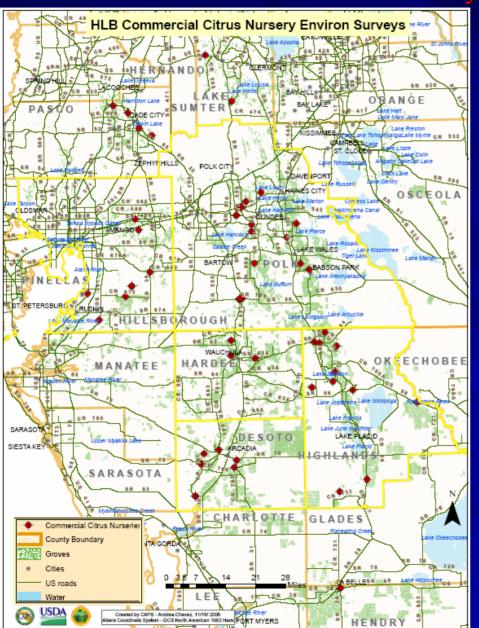


Florida HLB Program Overview Hurricane Wilma – October 24th





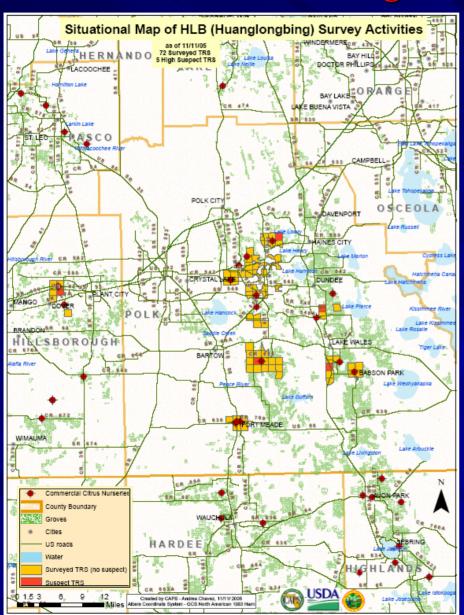
HLB - Program Activities Commercial Citrus Nursery Environ Survey







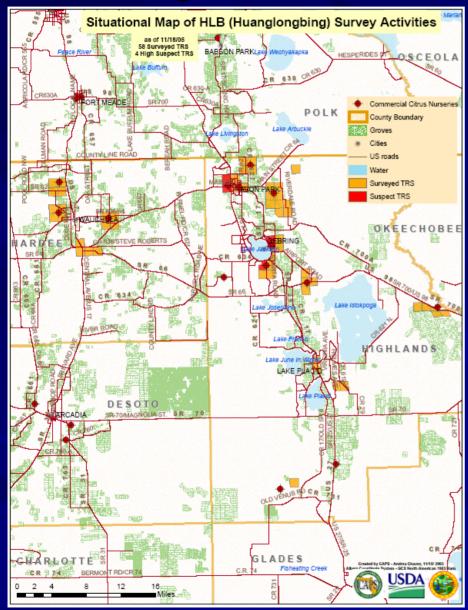
HLB - Program Activities Polk / Hillsborough County - 11/01/05



- •532 properties surveyed
- •86 samples taken
 - ✓ 10 High
 - ✓ 33 Medium
 - ✓ 43 Low
- •15,341 trees surveyed
- •74 TRS's (square miles) completed



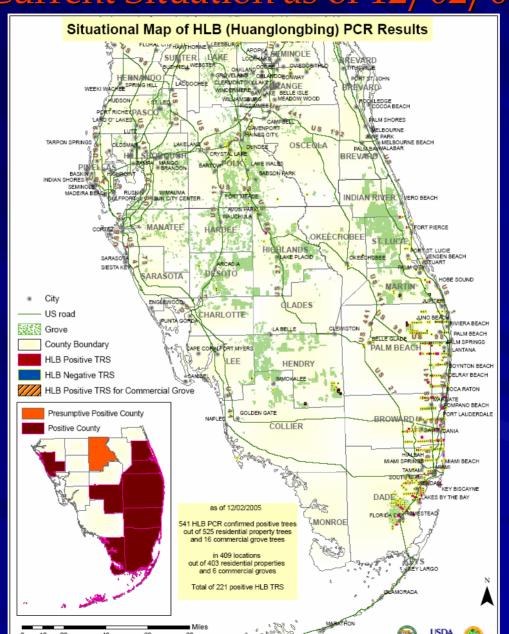
HLB - Program Activities Highlands / Hardee County - 11/14/05



- •383 properties surveyed
- •38 samples taken
 - ✓ 4 High
 - ✓ 10 Medium
 - ✓ 24 Low
- •4,666 trees surveyed
- •58 TRS's (square miles) completed



HLB - Program Activities Current Situation as of 12/02/05









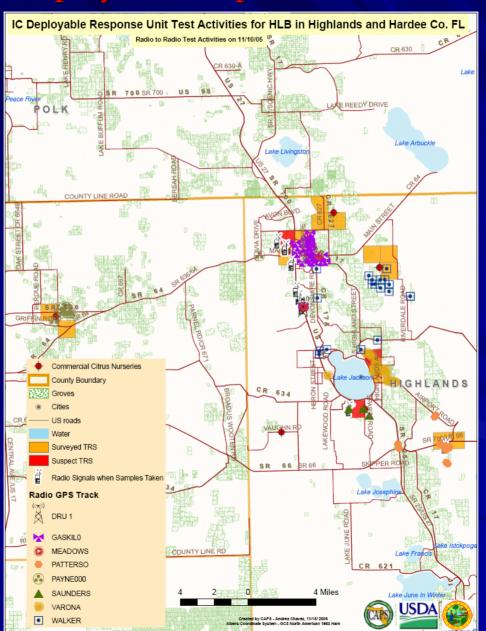




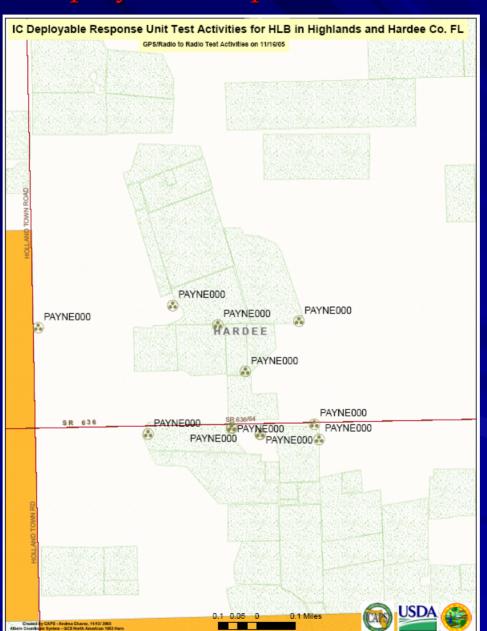




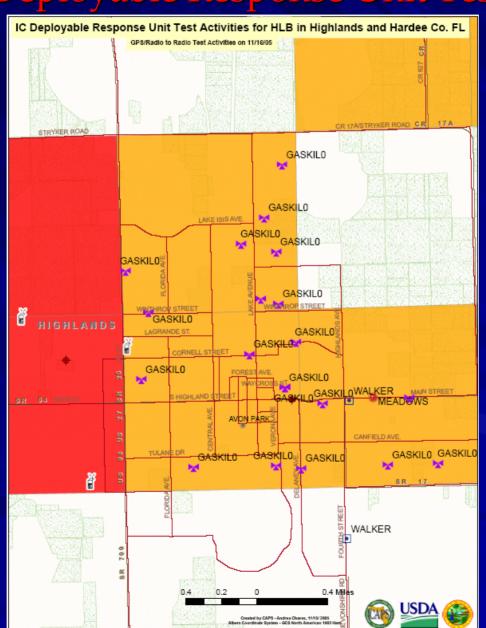






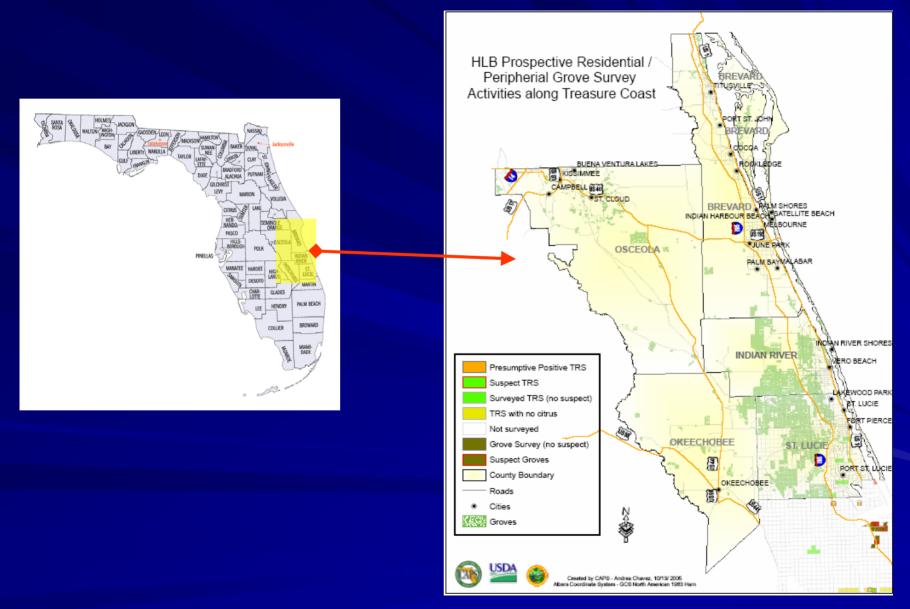








Future HLB - Program Activities Treasure Coast Survey – January 18th



Thank You - Any Questions ????



Special thanks to: Dr. Susan Halbert, Andrea Chavez, Eduardo Varona, Joe Beckwith, Andrew Wilds, and Brett Miller.